

REMARKS

With this response, applicants resubmit previously presented amended claims 1, 3-8, 13-17, 20, 23-24, 26-27, 29, 32, 35, 38 and 41-52, cancel no claims, add no new claims, such that claims 1 and 3-52 are currently pending. Applicants respectfully request allowance of all the pending claims.

Oath/Declaration

Applicants thank the Examiner for the telephone interview conducted June 19, 2007 with the attorney of record, Gayle A. Bush. The Examiner indicated that previous rejections under 35 U.S.C. §§102 and 103 were overcome. The Examiner indicated that the reissue oath/declaration is defective because it fails to identify at least one error which is relied upon to support the reissue application. During the interview the Examiner recommended that a supplemental declaration be submitted with this response and identify at least one specific error in the original patent.

In response, Applicants submit the attached Supplemental Declaration by the Assignee for Reissue Patent Application to Correct "Errors" Statement (37 CFR 1.175). Examiner is specifically directed to the section starting near the bottom of page one, which identifies at least one error and states the error arose without any of deceptive intent upon the part of the Applicant.

In the Office action, the Examiner stated that the proposed amendments filed September 14, 2006 did not comply with 37 CFR 1.173(b). In response, Applicants submit the amended claims that begin on page 2 of this paper, formatted to comply with 37 CFR 1.173. All amendments are made relative to the claims that appeared in issued patent U.S. 6,214,400, pursuant to 37 CFR 1.173(g). Claims 41-52 are claims that were not included in the issued patent U.S. 6,214,400. Therefore, as matter to be added by reissue these claims are underlined in their entirety pursuant to the format described in 37 CFR 1.173(d)(2) and 37 CFR 1.173(g). To document the changes made to claims 41-52, since originally filing of the Preliminary Amendment of March 2, 2004, claims 41-52 are shown below. Matter added to claims 41-52 relative to the Preliminary Amendment of March 2, 2004 is shown as underlined, and matter to be omitted relative to the Preliminary Amendment of March 2, 2004 is shown enclosed in brackets.

41. (Twice Amended) A method of heating a food product comprising:

a) providing a blancher including a food product-receiving chamber disposed in a housing that has a food product inlet and a food product outlet, a rotary food product transport mechanism disposed in the food product receiving chamber for urging the food product toward the food product outlet, a first manifold having a plurality of pairs of orifices each for introducing a fluid into the housing, and a second manifold having a plurality of pairs of orifices each for introducing a fluid into the housing;

b) introducing food product into a liquid heat transfer medium within the housing of the blancher through the inlet;

c) discharging a fluid through each one of the plurality of pairs of orifices into the heat transfer medium;

d) heating the food product in the food product-receiving chamber;

e) urging the food product in the food product-receiving chamber toward the outlet; and

f) removing the food product from the food product-receiving chamber through the outlet; and

wherein each manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with [its] the manifold orifices directing flow of liquid heat transfer medium toward the food product receiving chamber and 2) located outwardly of a lengthwise-extending centerline of the blancher with each one of the manifold orifices directing fluid flow into [in] an exiting quadrant thereof defined from where the rotating food product transport mechanism emerges from the heat transfer medium to adjacent the centerline but not passing to or beyond the centerline.

42. (Twice Amended) A method of heating a food product comprising:

a) providing a blancher including a food product-receiving chamber disposed in a housing that has a food product inlet and a food product outlet, a rotary food product transport mechanism disposed in the food product receiving chamber for urging the food product toward the food product outlet, and a manifold having a plurality of pairs of orifices distributed along substantially the length of the blancher housing each for introducing a fluid into the housing;

b) introducing food product into a liquid heat transfer medium within the housing of the blancher through the inlet;

c) discharging a fluid through each one of the plurality of pairs of orifices into the heat transfer medium;

d) heating the food product in the food product-receiving chamber;

e) urging the food product in the food product-receiving chamber toward the outlet; and

f) removing the food product from the food product-receiving chamber through the outlet;

wherein in step c) the fluid is a liquid that is discharged through [each one of] the orifices at a flow rate of at least 20 gallons per minute per foot of manifold; and

wherein the manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with [its] the manifold orifices directing flow of liquid heat transfer medium toward the food product receiving chamber and 2) located outwardly of a lengthwise-extending centerline of the blancher with each one of the manifold orifices directing fluid flow into [in] an exiting quadrant thereof defined from where the rotating food product transport mechanism emerges from the heat transfer medium to adjacent the centerline but not passing to or beyond

the centerline.

43. (Twice Amended) A method of heating a food product comprising:

a) providing a blancher including a perforate food product-receiving and generally cylindrical drum [chamber] disposed in a housing that has a food product inlet, [and] a food product outlet, and comprises a liquid heat transfer medium holding tank, a rotary auger having a plurality of auger flights [food product transport mechanism] disposed in the drum [food product receiving chamber] for urging the food product toward the food product outlet, a first manifold having a plurality of pairs of orifices each for introducing a fluid into the tank and drum [housing], and a second manifold having a plurality of pairs of orifices each for introducing a fluid into the tank and drum [housing];

b) introducing food product into [a] liquid heat transfer medium disposed in the drum [within the housing of the blancher] through the inlet with the liquid heat transfer medium having a temperature of at least 120° Fahrenheit;

c) discharging a fluid through each one of the plurality of pairs of orifices of each one of the manifolds into the liquid heat transfer medium;

d) heating the food product in the food product-receiving chamber;

e) urging the food product in the food product-receiving chamber toward the outlet by rotating the auger; and

f) removing the food product from the drum [food product-receiving chamber] through the outlet;

wherein in step c) the fluid is a liquid that is discharged through each one of the orifices of at least one of the manifolds at a flow rate of at least 20 gallons per minute per foot of manifold; and

wherein each manifold is 1) oriented in a lengthwise direction relative to the perforate drum [food product receiving chamber] with [its] the orifices of the manifold directing flow of liquid heat transfer medium toward the perforate drum [food product receiving chamber] and 2) located outwardly of a lengthwise-extending generally vertical centerline of the blancher in an exiting quadrant thereof defined from where at least one of the auger flights of the rotary auger [rotating food product transport mechanism] emerges from the liquid heat transfer medium to adjacent the centerline but not passing to or beyond the centerline.

44. (Twice Amended) A method of heating a food product comprising:

a) providing a blancher including a perforate food product-receiving chamber disposed in a housing that has a food product inlet and a food product outlet, a rotary food product transport mechanism disposed in the perforate food product receiving chamber for urging the food product toward the food product outlet, a first manifold having a plurality of pairs of orifices each for introducing a fluid into the housing, and a second manifold having a plurality of pairs of orifices each for introducing a fluid into the housing;

b) introducing food product into a heated liquid heat transfer medium within the housing of the blancher through the inlet;

c) discharging a fluid through each one of the plurality of pairs of orifices into the heat transfer medium;

d) heating the food product in the perforate food product-receiving chamber using the heat transfer medium;

e) urging the food product in the perforate food product-receiving chamber toward the outlet by rotating the food product transport mechanism; and

f) removing the food product from the perforate food product-receiving chamber through the outlet;

wherein each manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with each one of the plurality of the [its] orifices of each manifold each directing a separate flow of fluid [liquid heat transfer medium] toward and into the perforate food product receiving chamber, and 2) located outwardly of a lengthwise-extending generally vertical centerline of the blancher with each one of the manifold orifices directing fluid flow into [in] an exiting quadrant thereof defined from where the rotating food product transport mechanism emerges from the heat transfer medium to adjacent the centerline but not passing to or beyond the centerline; and

wherein a liquid is discharged from the orifices of one of the manifolds into heat transfer medium located in both the exiting quadrant and the perforate food product-receiving chamber and a [gas] gaseous or vaporous fluid is discharged from the orifices of the other one of the manifolds into heat transfer medium located in both the exiting quadrant and the perforate food product-receiving chamber.

45. **(Twice Amended)** A method of heating a food product comprising:

a) providing a blancher including a perforate food product-receiving chamber disposed in a housing that has a food product inlet and a food product outlet and comprises a liquid heat transfer medium holding tank, a helical auger rotary food product transport mechanism disposed in the food product-receiving chamber for urging the food product toward the food product outlet, a first manifold having a plurality of pairs of orifices each for introducing a fluid into the liquid heat transfer medium in the tank [housing], and a second manifold having a plurality of pairs of orifices each for introducing a fluid into the liquid heat transfer medium in the tank [housing];

b) introducing food product into a liquid heat transfer medium within the tank [housing] of the blancher by introducing the food product through the inlet into the perforate food product-receiving chamber;

c) discharging a fluid through each one of the plurality of pairs of orifices into the heat transfer medium;

d) heating the food product in the food product-receiving chamber by heat transfer from the liquid heat transfer medium to the food product;

e) urging the food product in the food product-receiving chamber toward the outlet by rotating the helical auger rotary food product transport mechanism; and

f) removing the food product from the food product-receiving chamber through the outlet;

wherein in step c) the fluid is a liquid that is discharged through [each one of] the orifices of [one of] the first and second manifolds at a flow rate of at least 20 gallons per minute per foot of manifold length at a pressure of at least 30 pounds per square inch]; and wherein each manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with its orifices directing flow of liquid heat transfer medium toward the perforate food product-receiving chamber and 2) located outwardly of a lengthwise-extending generally vertical centerline of the blancher with each one of the orifices directing fluid flow into [in] an exiting quadrant [thereof] of the tank defined from where the helical auger rotating food

product transport mechanism emerges from the liquid heat transfer medium in the tank to adjacent the centerline but not passing to or beyond the centerline.

46. **(Amended)** The method of claim 45 wherein in step c) the fluid is a gas that is discharged through each one of the orifices of the other one of the manifolds at a flow rate of at least 10 standard cubic feet per minute into the exiting quadrant.

47. **(Twice Amended)** A method of heating a food product comprising:

a) providing a blancher including a perforate food product-receiving chamber disposed in a tank of a housing that has a food product inlet and a food product outlet, a rotary food product transport mechanism disposed in the food product receiving chamber for urging [the] food product received in the food product-receiving chamber toward the food product outlet, and a manifold having a plurality of pairs of orifices each for introducing a fluid into a liquid heat transfer medium in the tank [housing];

b) introducing food product into [a] the food product-receiving chamber through the inlet and into liquid heat transfer medium received in the tank extending into the food product-receiving chamber [within the housing of the blancher through the inlet];

c) discharging a fluid through each one of the plurality of pairs of orifices into the liquid heat transfer medium;

d) heating the food product in the food product-receiving chamber;

e) urging the food product in the food product-receiving chamber toward the outlet; and

f) removing the food product from the food product-receiving chamber through the outlet;

wherein in step c) the fluid is a liquid that is discharged through each one of the orifices at a flow rate of at least 20 gallons per minute per foot of manifold length;

wherein the manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with its orifices directing flow of liquid heat transfer medium toward the food product receiving chamber and 2) located outwardly of a lengthwise-extending generally vertical blancher bisecting centerline of the blancher such that each one of the manifold orifices direct fluid flow into [in] an exiting quadrant thereof defined from where the rotating food product transport mechanism emerges from the heat transfer medium to adjacent the centerline but not passing to or beyond the centerline; and

wherein at least four thousand five hundred pounds of food product per hour is removed in step f).

48. **(Twice Amended)** A method of heating a food product comprising:

a) providing a blancher including a generally cylindrical perforate food product-receiving drum [chamber] disposed in a housing that comprises a tank and comprises [has] a food product inlet and a food product outlet, a rotary auger [food product transport mechanism] disposed in the food product receiving drum [chamber] for urging [the] food product received in the perforate food product-receiving drum toward the food product outlet, and a manifold [having] comprising a plurality of pairs of outwardly projecting orifices each for introducing a fluid into an aqueous heat transfer medium received in the tank [the housing];

b) introducing a plurality of pairs of pieces of food product into [a] an aqueous heat transfer medium received in the tank and disposed in the perforate food product-receiving drum [within the housing of the blancher through] via the inlet;

c) discharging a fluid through each one of the plurality of pairs of orifices of the manifold into the aqueous heat transfer medium;

d) heating the plurality of pairs of pieces of food product in the perforate food product-receiving drum [chamber] via heat transfer from the aqueous heat transfer medium having been heated to a temperature of at least 120° Fahrenheit;

e) urging the plurality of pairs of pieces of food product in the perforate food product-receiving drum [chamber] toward the outlet by rotation of the rotary auger; and

f) removing the plurality of pairs of pieces of food product from the perforate food product-receiving drum [chamber] through the outlet;

wherein in step c) the fluid [is a liquid] that is discharged through each one of the orifices comprises an aqueous liquid that is discharged at a flow rate [of at least 20 gallons per minute] and at a pressure;

wherein the manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with [its] the orifices of the manifold directing flow of fluid [liquid heat transfer medium] toward the perforate food product-receiving drum [chamber] and 2) located outwardly of a lengthwise-extending centerline of the blancher with each one of the orifices directing fluid flow into [in] an exiting quadrant thereof defined from where the rotating rotary auger [food product transport mechanism] emerges from the heat transfer medium to adjacent the centerline but not passing to or beyond the centerline; [and]

wherein there is at least eight inches of depth of pieces of food product in the perforate food product-receiving drum [chamber]; and
wherein the manifold extends substantially the length of the tank .

49. **(Twice Amended)** A method of heating a food product comprising:

a) providing a blancher including a perforate food product-receiving chamber disposed in a tank of a housing that has a food product inlet and a food product outlet, a rotary food product transport mechanism disposed in the food product receiving chamber for urging [the] food product received in the food product-receiving chamber toward the food product outlet, and a manifold having a plurality of pairs of orifices each for introducing a fluid into a liquid heat transfer medium in the tank [housing];

b) introducing food product into [a] the food product-receiving chamber through the inlet and into liquid heat transfer medium received in the tank extending into the food product-receiving chamber [within the housing of the blancher through the inlet];

c) discharging a fluid through each one of the plurality of pairs of orifices into the heat transfer medium;

d) heating the food product in the food product-receiving chamber;

e) urging the food product in the food product-receiving chamber toward the outlet; and

f) removing the food product from the food product-receiving chamber through the outlet;

wherein in step c) the fluid is a liquid that is discharged through each one of the orifices at a flow rate of at least 20 gallons per minute per foot of manifold length;

wherein the manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with its orifices directing flow of liquid heat transfer medium toward the food product receiving chamber and 2) located outwardly of a lengthwise-extending generally vertical blancher bisecting centerline of the blancher such that each one of the manifold orifices direct fluid flow into [in] an exiting quadrant thereof defined from where the rotating food

product transport mechanism emerges from the heat transfer medium to adjacent the centerline but not passing to or beyond the centerline; and
wherein at least eight thousand pounds of food product per hour is removed in step f).

50. (Twice Amended) A method of heating a food product comprising:

a) providing a blancher including a perforate food product-receiving chamber disposed in a tank of a housing that has a food product inlet and a food product outlet, a rotary food product transport mechanism disposed in the food product receiving chamber for urging [the] food product inside the food product-receiving chamber toward the food product outlet, a first manifold having a plurality of pairs of orifices each for introducing a fluid into the tank and the food product receiving chamber [housing], and a second manifold having a plurality of pairs of orifices each for introducing a fluid into the tank and the food product receiving chamber [housing];

b) introducing food product into [a] the food product-receiving chamber through the inlet and into a liquid heat transfer medium received in the tank and extending into the food product-receiving chamber [within the housing of the blancher through the inlet];

c) discharging a fluid through each one of the plurality of pairs of orifices into the heat transfer medium;

d) heating the food product in the food product-receiving chamber;

e) urging the food product in the food product-receiving chamber toward the outlet; and

f) removing the food product from the food product-receiving chamber through the outlet;

wherein in step c) the fluid is a liquid that is discharged through each one of the orifices of at least one of the manifolds at a flow rate of at least 20 gallons per minute per foot of manifold length;

wherein each manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with its orifices directing flow of liquid heat transfer medium toward the food product receiving chamber and 2) located outwardly of a lengthwise-extending centerline of the blancher with each one of the orifices directing fluid flow into [in] an exiting quadrant thereof defined from where the rotating food product transport mechanism emerges from the heat transfer medium to adjacent the centerline but not passing [to or] beyond the centerline; and

wherein at least [four thousand five hundred] eight thousand pounds of food product having a density of at least 55 lb/ft³ [per hour] is removed per hour in step f).

51. (Twice Amended) A method of heating a food product comprising:

a) providing a blancher including a perforate food product-receiving chamber disposed in a housing that has a food product inlet and a food product outlet and that is capable of holding heated water as a heat transfer medium, a rotary food product transport mechanism disposed in the food product-receiving chamber for urging [the] food product received in the food product-receiving chamber toward the food product outlet, a first manifold having a plurality of [pairs of] orifices each for introducing a fluid into heat transfer medium in the housing, and a second manifold having a plurality of [pairs of] orifices each for introducing a fluid into heat transfer medium in the housing, and a recirculation system comprising an intake through which fluid from within the blancher can be withdrawn and delivered to at least one of the first and second manifolds, and a pump in fluid-flow communication with the intake for drawing fluid from within the blancher and communicating it to one of the first and second manifolds;

b) introducing food product into a heat transfer medium within the housing [of the blancher] through the inlet;

c) withdrawing fluid from within the housing and delivering it to one of the first and second manifolds;

[c)] d) discharging [a] fluid through each one of the plurality of [pairs of] orifices of the first and second manifolds into the heat transfer medium;

[d)] e) heating the food product in the food product-receiving chamber via heat transfer from the heat transfer medium;

[e)] f) urging the food product in the food product-receiving chamber toward the outlet;
and

[f)] g) removing the food product from the food product-receiving chamber through the outlet;

wherein in step [c)] d) the fluid [is a liquid] that is discharged through each one of the orifices of at least one of the manifolds comprises water [at a flow rate of at least 20 gallons per minute]; and

wherein the first and second manifolds are spaced apart and have each one of the plurality of orifices of each manifold oriented to direct fluid discharged from each orifice into an exiting quadrant in the housing toward the food product-receiving chamber impinging against food product disposed in heat transfer medium in the exiting quadrant [each manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with its orifices directing flow of liquid heat transfer medium toward the food product receiving chamber and 2) located outwardly of a lengthwise-extending centerline of the blancher in an exiting quadrant thereof defined from where the rotating food product transport mechanism emerges from the heat transfer medium to adjacent the centerline but not passing to or beyond the centerline; and

wherein there is at least eight inches of depth of food product in the food product-receiving chamber].

52. (Twice Amended) A method of heating a food product comprising:

a) providing a blancher including a perforate food product-receiving chamber disposed in a tank of a housing that has a food product inlet and a food product outlet, a rotary food product transport mechanism disposed in the food product receiving chamber for urging [the]] food product inside the food product-receiving chamber toward the food product outlet, a first manifold having a plurality of pairs of orifices each for introducing a fluid into the tank and the food product-receiving chamber [housing], and a second manifold having a plurality of pairs of orifices each for introducing a fluid into the tank and the food product-receiving chamber [housing];

b) introducing food product into [a] the food product-receiving chamber through the inlet and into a liquid heat transfer medium received in the tank and extending into the food product-receiving chamber [within the housing of the blancher through the inlet];

c) discharging a fluid through each one of the plurality of pairs of orifices into the heat transfer medium;

d) heating the food product in the food product-receiving chamber;

e) urging the food product in the food product-receiving chamber toward the outlet; and

f) removing the food product from the food product-receiving chamber through the outlet;

wherein in step c) the fluid is a liquid that is discharged through each one of the orifices of at least one of the manifolds at a flow rate of at least 20 gallons per minute per foot of manifold length;

wherein each manifold is 1) oriented in a lengthwise direction relative to the food product receiving chamber with its orifices directing flow of liquid heat transfer medium toward the food product receiving chamber and 2) located outwardly of a lengthwise-extending centerline of the blancher with each one of the orifices directing fluid flow into [in] an exiting quadrant thereof defined from where the rotating food product transport mechanism emerges from the heat transfer medium to adjacent the centerline but not passing to or beyond the centerline; and

wherein at least eight inches of food product depth is heated in step d) and at least eight thousand pounds of food product per hour is removed in step f).

Information Disclosure Statement

The Examiner indicated that all references cited on the patent face must be cited in the reissue in order to be published.

In response, Applicants submit the attached Information Disclosure Statement citing the references, and in particular, U.S. Patent. Nos. 5,146,841; 5,587,073; 5,780,088; and 5,809,787.

Conclusion

In view of the above amendments and remarks, the Applicants submit that the claims, as amended, are novel and patentable over the prior art, that all the rejections to the claims have been overcome, and that the application is in condition for allowance. Early, favorable consideration is respectfully requested. Applicants kindly request that the Examiner telephone the attorney of record in the event a telephone discussion would be helpful in advancing the prosecution of the present application.

Respectfully submitted,



Gayle A. Bush
Reg. No. 52,677

Docket No.: 062108-9083-00
Michael Best & Friedrich LLP
100 East Wisconsin Avenue, Suite 3300
Milwaukee, Wisconsin 53202-4108
414.271.6560